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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,389	06/28/2001	Claude Chapel	PF980093	4273

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EXAMINER

SHIBRU, HELEN

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/869,389	<b>Applicant(s)</b> CHAPEL ET AL.	
	<b>Examiner</b> HELEN SHIBRU	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 16-33 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 16-33 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 28 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>06/28/2001</u> . | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 16-22 and 32-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Chaney (EP 0 662 771 A1).

Regarding claim 16, Chaney discloses a digital video reception device (see fig. 4), comprising:

means of reception and of demultiplexing of a multiplexed digital stream (see page 3 lines 26-34 and page 5 lines 38-48); and

means of storage comprising two file systems (master program and special program) having different recording block sizes (see page 4 lines 38-48, page 5 lines 11-15 and line 47- page 6 line 5 and lines 28-33).

Regarding claim 17, Chaney discloses the blocks of the first file system are of large size (four blocks of data) and adapted to the recording of audio/video streams and in that the blocks of the second file system are of smaller size (two blocks of data) and adapted to the recording of files of smaller size than the audio/video streams (see page 5 lines 11-15 and line 50-page 6 line 5).

Regarding claim 18, Chaney discloses the block size of the first file system is larger by at least an order of magnitude than the block size of the second file system (see page 5 lines 11-15).

Regarding claim 19, Chaney discloses the first file system is adapted to sequential access of the recorded data, while the second file system is adapted to random access of the data recorded therein (see page 4 lines 49-55, page 5 lines 2-15, and page 7 lines 41-58).

Regarding claim 20, Chaney discloses the first file system comprises simple indirect addressing, while the second file system comprises multiple indirect addressing (see page 6 lines 48-54).

Regarding claim 21, Chaney discloses the storage means comprise a recordable disk comprising a single boot block, a first area reserved for the service data of the first file system and for the corresponding data blocks, and a second area reserved for the service data of the second file system and for the corresponding data blocks (see fig. 5 memory (30), page 7 lines 10-22 and line 47-page 8 line 1).

Regarding claim 22, Chaney discloses a first video writing memory for accumulating a predetermined quantity of demultiplexed video packets (see page 5 line 54-page 6 line 5 and lines 42-47),

a second audio writing memory for accumulating demultiplexed audio packets (see page 5 line 54-page 6 line 5, audio and video data are stored in different memory (FIFO operation type)), and

means of storage being adapted to store the remultiplexed audio and video packets in the form of blocks of the first file system, each block comprising a first area for recording the video packets and of fixed size equal to said predetermined quantity, and a second area for recording for audio packets and of fixed size such that it is greater than or equal to the maximum quantity

of audio data which can be accumulated while obtaining the predetermined quantity of video data (see page 6 lines 3-10, lines 16-23 and lines 34-42).

Regarding claim 32, Chaney discloses a double file system wherein a first system is adapted to files of an audio/video stream type and wherein a second file system is adapted to files of smaller size than the audio/video streams (see page 4 lines 38-48, page 5 lines 11-15 and line 47-page 6 line 5 and lines 28-33).

Regarding claim 33, Chaney discloses a recordable disk divided into sectors, data blocks of the first file system having a size of at least 256 sectors, data blocks of the second file system having a size of a few sectors (see page 5 lines 11-15 and lines 27-34, and page 7 lines 47-58).

3. Claims 16, 22-28, and 30-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakase (US Pat. No. 5,742,361).

Regarding claim 1, Nakase discloses a digital video reception device (see fig. 1 and col. 9 lines 38-43), comprising:

means of reception and of demultiplexing of a multiplexed digital stream (see fig. 7 TS demultiplexer (1) and col. 15 line 66-col. 16 line 4) , and

means of storage comprising two file systems having different recording block sizes (see col. 9 lines 47-48 and lines 56-58, col. 10 line 55-col. 11 line 6, col. 13 lines 47-67 and col. 14 lines 12-21 and 39-67, audio and video files).

Regarding claim 22, Nakase discloses a first video writing memory for accumulating a predetermined quantity of demultiplexed video packets (see fig. 7 video decoder (2), memory (5) and col. 9 lines 47-48, col. 10 lines 59-64 and col. 16 lines 34-39),

a second audio writing memory for accumulating demultiplexed audio packets (see fig. 7 audio decoder (3), memory (5) and col. 9 lines 53-54 and col. 11 lines 2-10), and

means of storage being adapted to store the remultiplexed audio and video packets in the form of blocks of the first file system, each block comprising a first area for recording the video packets and of fixed size equal to said predetermined quantity, and a second area for recording for audio packets and of fixed size such that it is greater than or equal to the maximum quantity of audio data which can be accumulated while obtaining the predetermined quantity of video data (see col. 13 lines 47-67 and col. 14 lines 12-21 and 39-44).

Regarding claim 23, Nakase discloses a third video reading memory (video transfer unit (106) and memory (104) in fig. 1) for reading video data from the storage means, and a fourth audio reading memory (audio transfer unit (107) and memory (104) in fig. 1) for the reading of audio data, the respective sizes of the third and fourth memories, video and audio reading respectively, being equal to the sizes of the first and second memories, video and audio writing respectively (see col. 10 line 55-col. 11 line 6).

Regarding claim 24, Nakase discloses a writing memory for transmitting data to the storage means, which memory is organized as an area comprising N video writing memories of FIFO type and an audio writing area comprising a memory of FIFO type having the size of N audio writing memories (see col. 10 lines 15-20, col. 12 lines 25-31 and col. 12 lines 41-45),

means for controlling the transfer of video data to a first of the N video writing memories and of audio data to the audio writing area, the transfer of video data being continued to a next video writing memory when said first of the N video writing memories is full (see col. 9 lines 62-67 and col. 10 lines 50-58); and

means for storing the location, in the area for recording audio data, of the audio data corresponding to each of the N video writing memories (see col. 10 line 59-col. 11 line 5).

Regarding claim 25, Nakase discloses initiating the transfer of video and audio data stored in said writing memory to the storage means as soon as one of the N video writing memories has been filled (see col. 10 lines 24-36 and col. 11 lines 11-23).

Regarding claim 26, Nakase discloses a reading memory for receiving data from storage means, which memory is organized as an area comprising N video reading memories of FIFO type and an audio reading area comprising a memory of FIFO type having the size of N audio reading memories (see col. 10 lines 50-59),

means for controlling the transfer of video data to a first of the N video reading memories and of audio data to the audio reading area, the transfer of video data being continued to a next video reading memory when said first of the N video reading memories is full (see col. 9 lines 62-67 and col. 10 lines 37-49); and

means for storing the location, in the area for reading audio data, of the audio data corresponding to each of the N video reading memories (see col. 10 line 59-col. 11 line 5).

Regarding claim 27, Nakase discloses means for initiating the transfer of video and audio data stored in said reading memory to a decoder of said data when the set of N video reading memories has been filled (see col. 10 lines 24-36, col. 11 lines 11-23).

Regarding claim 28, Nakase discloses a process for recording audio and video data in a digital television receiver (see TS in fig. 1 and col. 9 lines 38-43), comprising the steps of:

demultiplexing audio and video packets relating to one and the same program (see col. 13 lines 16-26);

simultaneous accumulation of the demultiplexed video data in a first memory and of the demultiplexed audio data in a second memory (see col. 13 lines 56-67 and col. 14 lines 39-44); stopping the accumulation in said memories following the obtaining of a predetermined quantity of video data in said first memory (see col. 14 lines 12-21); and recording of the video data accumulated in said first memory and of the audio data accumulated in the second memory respectively in a first area of a block whose fixed size is equal to said predetermined quantity and in a second area of this block, the size of this second area being fixed and chosen in such a way that it is greater than or equal to the maximum quantity of audio data which can be accumulated while obtaining said predetermined quantity of video data (see col. 13 lines 47-67 and col. 14 lines 12-21 and 39-44).

Regarding claim 30, Nakase discloses recording in each block of a data item indicating the quantity of audio data recorded in this block (see col. 12. lines 8-14 the invalid packets are chosen and discarded).

Regarding claim 31, Nakase discloses the recorded audio and video data are elementary stream packets, with the exclusion of information emanating from the transport layer (see col. 9 lines 48-55 and fig. 1 video (106) and audio (107)).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakase.



Regarding claim 29, although Nakase does not specifically disclose the ratio of the sizes of the first and second areas is such that it is greater than or equal to the maximum ratio of the bit rate of video data and of the bit rate of audio data in the digital stream, Nakase does teach a demultiplexer process capable of executing a high bit rate and complicated header structure (see col. 18 lines 50-60 and col. 19 lines 4-8). Official Notice is given that it is well known in the art that the ratio of the sizes of the first and second areas are greater than or equal to the maximum ratio of the bit rate of video and audio data. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nakase that the ratio of the sizes of the first and second areas is greater than or equal to the maximum ratio of the bit rate of video data and of the bit rate of audio data in the digital stream in order to provide a low-cost data.

### *Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gushima (US Pat. No. 5,506,825).


Artieri (US Pat. No. 6,104,751).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELEN SHIBRU whose telephone number is (571) 272-7329. The examiner can normally be reached on M-F, 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAMES J. GROODY can be reached on (571) 272-7950. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Helen Shibru  
December 6, 2005

  
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Art Unit 262 2616